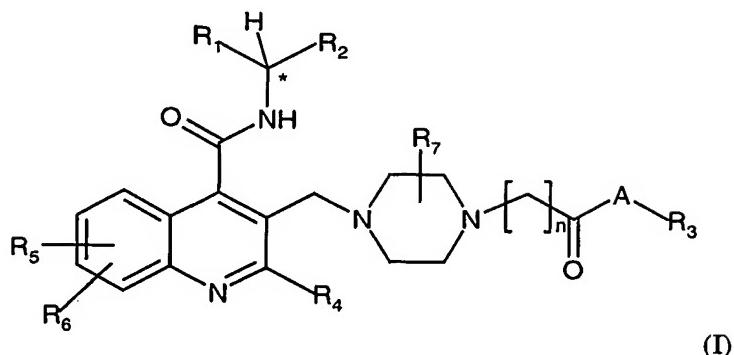


What is claimed is:

1. A compound of formula (I)



5

wherein:

R₁ is H or substituted or unsubstituted (C₁₋₆)alkyl;

R₂ is substituted or unsubstituted aryl, (C₃₋₇)cycloalkyl, or heterocycle;

10

R₃ is H or substituted or unsubstituted (C₁₋₆)alkyl, (C₃₋₇)cycloalkyl, aryl or heterocycle;

A is NR₈ or O;

15

R₈ is H or substituted or unsubstituted (C₁₋₆)alkyl;

R₄ is substituted or unsubstituted heterocycle;

20 R₅ is H or up to three substitutents independently selected from the list consisting of alkyl, alkenyl, aryl, alkoxy, or a hydroxylated derivative thereof, hydroxy, halogen, nitro, cyano, carboxy, alkylcarboxy, alkylcarboxyalkyl, haloalkyl, amino or mono- or dialkylamino; or R₅ represents a bridging moiety which is arranged to bridge two adjacent ring atoms, wherein the bridging moiety comprises alkyl or dioxyalkylene;

25

R₆ is H or halo;

R₇ is oxo;

n is 1 to 4; or a pharmaceutically acceptable salt thereof.

5

2. A compound according to claim 1 wherein R₁ is methyl.

3. A compound according to claim 1 wherein R₂ is substituted or unsubstituted phenyl or cyclohexyl.

10

4. A compound according to claim 1 wherein R₃ is methyl or substituted or unsubstituted morpholino, piperazine, pyrrole, piperidine, thiophene, imidazole, or pyrazole.

15 5. A compound according to claim 1 wherein R₈ is H or methyl.

6. A compound according to claim 1 wherein R₄ is substituted or unsubstituted 2-thienyl or 3-thienyl.

20 7. A compound according to claim 1 wherein R₅ is H or fluoro.

8. A compound according to claim 1 wherein R₆ is H or fluoro.

9. A compound according to claim 1 which is:

25 3-(4-Dimethylcarbamoylmethyl-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-[4-(2-Morpholin-4-yl-2-oxo-ethyl)-3-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

30

3-[3-Oxo-4-(2-oxo-2-piperazin-1-yl-ethyl)-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-(4-Carbamoylmethyl-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

5 3-[4-[2-(4-Methyl-piperazin-1-yl)-2-oxo-ethyl]-3-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-[3-Oxo-4-(2-oxo-piperidin-1-yl-ethyl)-piperazin-1ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

10 3-[3-Oxo-4-(2-oxo-pyrrolidin-1-yl-ethyl)-piperazin-1ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

15 3-[4-(3-Morpholin-4-yl-3-oxo-propyl)-3-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

3-[4-(2-Morpholin-4-yl-2-oxo-ethyl)-2-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

20 3-(4-Dimethylcarbamoylmethyl-2-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

6-Fluoro-3-[4-(2-morpholin-4-yl-2-oxo-ethyl)-3-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

25 6-Fluoro-3-[3-oxo-4-(2-oxo-2-pyrrolidin-1-yl-ethyl)-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

30 3-[4-[2-((R)-2-Hydroxymethyl-pyrrolidin-1-yl)-2-oxo-ethyl]-3-oxo-piperazin-1-ylmethyl]-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

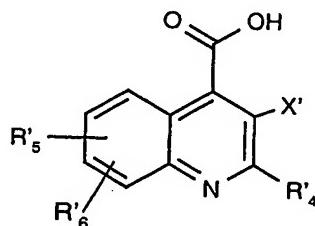
3-(4-{[(2,5-Dimethyl-2H-pyrazol-3ylmethyl)-carbamoyl]-methyl}-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide,

5

3-(4-{[(5-Methyl-1H-imidazol-2ylmethyl)-carbamoyl]-methyl}-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide, and

10 3-{4-[(Methyl-thiophen-2ylmethyl)-carbamoyl]-methyl}-3-oxo-piperazin-1-ylmethyl)-2-thiophen-2-yl-quinoline-4-carboxylic acid ((S)-1-cyclohexyl-ethyl)-amide, or a pharmaceutically acceptable salt thereof.

15 10. A process for the preparation of a compound of formula (I) according to claim 1 or a salt thereof and/or a solvate thereof, which process comprises reacting a compound of formula (II) or an active derivative thereof:



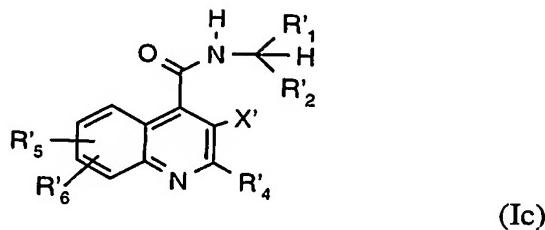
(II)

wherein R'4, R'5, R'6 and X' are R₄, R₅, R₆ and X respectively as

20 hereinbefore defined in relation to formula (I) or a group convertible to R₄, R₅, R₆ and X respectively; with a compound of formula (III):



wherein R'₁ and R'₂, are R₁ and R₂ as defined for formula (I) or a group or atom convertible to R₁ and R₂ respectively; to form a compound of formula (Ic):



- 5 wherein R'₁, R'₂, X', R'₄, R'₅ and R'₆ are as defined above, and thereafter carrying out one or more of the following optional steps:
 - (i) converting any one of R'₁, R'₂, X', R'₄, R'₅ and R'₆ to R₁, R₂, X, R₄, R₅ and R₆ respectively as required, to obtain a compound of formula (I);
 - (ii) converting a compound of formula (I) into another compound of formula (I);
 - 10 and
 - (iii) preparing a salt of the compound of formula (I) and/or a solvate thereof.

- 11. A pharmaceutical composition which comprises a compound according to claim 1 and a pharmaceutically acceptable carrier.

- 15 12. A method of treating respiratory diseases in mammals, which comprises administering an effective amount of a compound according to claim 1.